

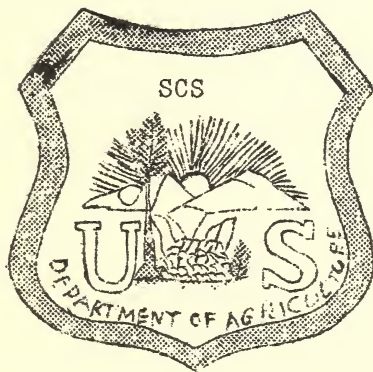
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SEP 27 1937

THE TAR HEEL WASH OFF

MARCH - 1937



U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

DEEP RIVER AREA

HIGH POINT, NORTH CAROLINA



THE STATE COORDINATOR'S MESSAGE

With the coming of good weather, farmers are making preparations for spring planting.

It is suggested that all cooperating farmers follow as closely as possible, the cropping plans set forth in the farm agreement. These plans have been worked out for the purpose of aiding the farmer in the matter of improving his land and conserving his soils, and if these things are accomplished, the matter of increased yields in farm crops and therefore, increased revenue from the farm, will take care of themselves.

Every cooperating farmer should study his agreement and familiarize himself with the season's cropping plans. He should go over the plan for each field carefully, and if there is anything that is not clear to him, or, if any changes are desired, the matter should be taken up either by a personal call, or by letter, with the Soil Conservation Service, whose headquarters offices are located in the New Post Office Building in High Point. Or, the matter may be discussed with the field man when he calls. However, it will be impossible for the limited number of technical men to call as often as they would like. Therefore, any questions that may arise during the absence of the field man should be taken up with the High Point offices as suggested. They will receive prompt and courteous attention.

The important matter confronting us is the conservation of the soil, and the Service is always ready to lend every possible assistance in this work.

Dr. J. H. Stallings,
State Coordinator.

CONTOUR FURROWING

Contour furrowing, as the name suggests, means the throwing up of furrows, following the contour of the land. If the field is badly cut up with gullies of from six to eight inches in depth, or deeper, it is best to close the furrows at the edge of the gullies. But if the field has only shallow depressions, the furrow may be cut across the depressions providing the base of the furrow is kept level. To keep the base of the furrow level, it must curve up the gullies or depressions and down the crests of the hills between, thus making a correct contour upon the field.

The fundamental purpose of contour furrows are to reduce soil and water loss on the pasture. The contour furrow accomplishes this aim in several different ways. By having a level base, the furrow will not allow the water to wash down the hillside, but will hold it and distribute it regularly over the field. The water is thus given time to soak into the soil.

By taking the water out of the gullies and leaving them dry, except for the water that falls there, grass and other erosion-resisting plants are given a chance to grow. As time goes on, the gullied land will again become tillable and productive.

CARE OF TERRACE OUTLETS

Excessive winter rains and extremely wet ground, have practically brought work in the field to a standstill during the past several weeks. As a result of the rains, some damage has occurred to terrace outlet channels, and repairs should be made immediately.

On vegetative outlets, sections of sod may have washed out. These breaks may be repaired by replacing the sod. However, before replacing the sod, the ground should be prepared as a regular seed bed. The sod should be placed and well tamped. Care should be taken that the sod applied does not project above the bottom of the ditch. A small amount of topsoil should be scattered over the sod and lightly raked in to fill the crevices. Manure or a small amount of fertilizer may also be applied on the sod. A light scattering of seed over the area will aid in thickening the sod.

Where excessive silting has occurred in the channel, the silt should be removed at once. If allowed to remain, the ditch may fill completely and cause the spread of water over the field.

In outlets where concrete masonry or rock baffles have been used, rocks should be placed in "pot holes" that have occurred below the baffles. This forms an apron that prevents the water from further digging in and undermining the structures.

Where the water has cut under loose rock, rock masonry or concrete structures, the holes should be filled and a strip of sod placed immediately above the structure. This strip will serve to carry the water over the structure instead of allowing it to go under,

and thus prevent further undermining.

Time spent now in repairing terrace outlet channels, will save additional time and expense later, since the most severe damage occurs to these structures during the spring and summer months, and especially during the summer.

IMPORTANCE OF PROTECTING LAND FROM GRAZING

Too much stress cannot be placed upon the importance of protecting woodland from fire and grazing. Exposing woodlands to the ranging of livestock, is only slightly less destructive than fire.

The planting of young seedlings and the improvement of timber stands, is labor and expense lost unless the areas are protected from the invasion of livestock, which includes hogs and goats.

Cattle eat and trample down the young seedlings. They also pack the soil and cause the water to run off instead of being absorbed into the ground. Hogs eat the seeds that fall from the trees, root out the seedlings and frequently eat the roots.

BY ALL MEANS KEEP YOUR LIVESTOCK OUT OF THE WOODLANDS, ESPECIALLY THE NEWLY PLANTED AREAS.

TIME TO PLANT LESPEDEZA

The month of March is a favorable time to plant lespedeza seed; and while the planting has been in progress for several weeks, there is still time to plant this valuable legume, and in fact, successful seeding may be done as late as early April if a good seed bed is prepared and the seed covered lightly with a drag harrow or other farm implement.

Seeding lespedeza is one of the first important steps in the preparation of land for strip cropping. Alternate strips may be seeded to lespedeza between strips of row crops. However, a better method is to seed the entire field to lespedeza and let it grow for one or two years. Then begin the rotation by turning under a strip for row crops while the remaining alternate strips are left in lespedeza. These strips should be laid off on the contour of the field. This system provides organic matter and increases the fertility of the soil. At the same time, effective soil protection is provided by the lespedeza strips. Small grain and lespedeza may follow the row crops, while the old lespedeza strips are turned for row crops.

Dr. A. J. Pieters, of the United States Department of Agriculture, writing in the February issue of Progressive Farmer, speaks very highly of this valuable legume as a soil builder.

"Records collected from actual farm tests in North Carolina," said Mr. Pieters, "show that the yields of cotton after lespedeza has increased an average of 142 per cent and corn has increased 115 per cent.

Lespedeza is a very effective erosion control legume, and experiments made at the Statesville, North Carolina Soil Erosion Experiment

Station show that on a series of plots located on an 8 per cent slope, lespedeza permitted a soil loss of only 0.8 tons of soil per acre, per year. The soil loss where corn was grown under similar conditions and on the same slope, was 17.22 tons per acre, and fallow land lost 64.79 tons of soil per acre, per year.

Lespedeza makes a valuable hay crop also, and throughout the greater part of the North Carolina Piedmont, a yield of one ton per acre is easily obtained on the average land. The income from seed is also another important consideration in the growing of this legume. Lespedeza is now being grown as far north as Canada, but in that region the seasons are too short for the seed to mature, and therefore, the northern grower must depend upon the southern producer for his seed each year. This should be an inducement to the North Carolina farmers to grow more lespedeza seed.

In starting a good crop rotation system, lespedeza is an ideal crop with which to begin. It may be seeded either on top of small grain or on land now bare. No seed bed preparation is necessary on the grain land, but if the seed is rolled in with a cultipacker or run over lightly with a drag harrow, a better stand will be obtained. If the seeding is done on land not planted to small grain, the seed bed should be thoroughly disced before the lespedeza is sown.

Lespedeza is a splendid crop for building the land up to the point where it will support a good pasture sod, and at the same time, will provide a limited amount of grazing.

Note: If the land has a heavy growth of vegetation, it should be plowed before being sown to lespedeza.

FLOWING TERRACED LAND

After the excessive rains of the fall and winter, all terraces should be carefully checked and breaks should be repaired immediately. This may be done by the use of a drag pan or shovel. Points in the channel that have silted up should be opened in order to prevent the impounding of water and possible breaks.

In breaking land, too much emphasis cannot be placed upon the proper plowing of the terraces. The method to be used depends upon the condition of the terraces. However, if the terrace has been worked down considerably, or, if it has not been built quite high enough, the following method should be used:

Land No. 1: Start the back furrow at the terrace ridge, and throw all furrows toward the ridge until the bottom of the channel is reached.

Land No. 2: Start a back furrow 6 to 10 feet above the channel, throwing all furrows out of the channel. This is continued until the bottom of the channel is reached. .

Land No. 3: The remaining unbroken strip can be broken as a separate land.

Note: Land No. 2 must be varied from year to year to prevent building a ridge above the channel. If the terrace is already high enough to be safe, the following method may be used:

Start the back furrows at the terrace ridge, throwing all furrows toward the ridge until approximately midway between the terraces. The remaining small areas between this and the lands plowed on the adjacent terraces, may be plowed as separate lands. The finishing furrow should be varied from year to year in order to

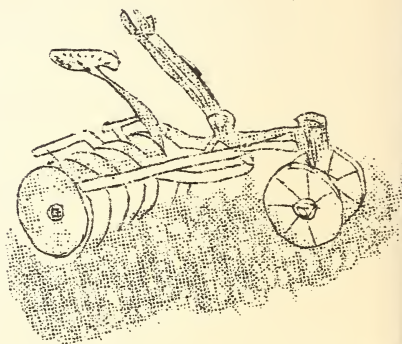
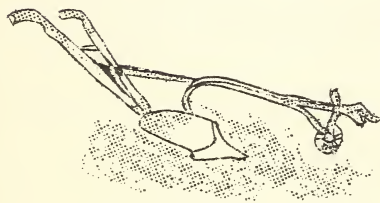
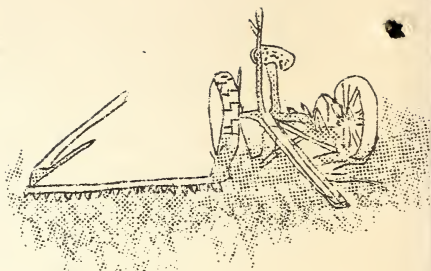
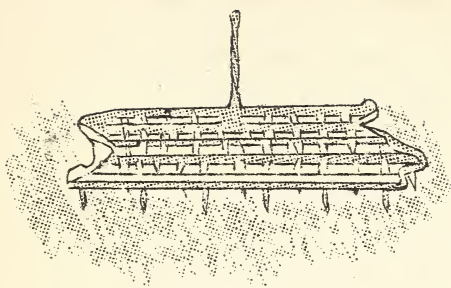
prevent low places from forming between the terraces. If this method fills up the channel too much, a light grader or V-drag may be used to clean it out.

Another excellent method of plowing, is to plow the terrace ridges as in the first method mentioned, and then, continuing down the back slope of the terrace, throw all the remaining furrows up the hill until the channel of the terrace below is reached. This, of course, requires a reversible plow, which can be bought at a price not greatly exceeding that of an ordinary plow. By using one of these plows, and thus throwing the furrows up the slope, the movement of the soil down the slope can be partially counteracted.

In shifty, sandy soils, it is suggested that the light drag be used, not only after plowing, but at any time after rains, when the channel has been choked up with sand.

SOW HAY AND PASTURE MIXTURES EARLY

Land should be thoroughly prepared, lime applied and ready to seed to hay, pasture and clover mixtures by early March. An application of manure or fertilizer will increase the yield of these crops and make a better sod.



Have you checked your farm machinery to see that
all are in good condition?

CARE OF FARM MACHINERY

Good machinery is essential in the production of all farm products, including erosion-resisting crops such as the clovers, lespedeza, alfalfa and the grasses.

A good plow is required to properly break the land. A harrow or disc in good repair will pulverize the soil much more thoroughly than one that is about to fall to pieces. In order to sow grain uniformly and secure a good stand of small grain for winter protection of the soil, the grain drill must be in good working condition.

The proper preparation of the land is the first step in securing a quick growth and a good stand of erosion-resisting plants. A well prepared seed bed conserves moisture, permits a quicker and more uniform germination of the seed and permits a more vigorous growth of the young plants. Since this work cannot be properly accomplished with broken-down machinery, it behooves the farmer to see to it that his farming implements, both heavy and light, are kept in first class working condition at all times.

If there are broken parts that must be replaced by new ones, this matter should be attended to at once. A delay of only a week or two in planting may cause the crop to lose much of its erosion control effectiveness, as well as to sharply curtail the yield.

PLANTING TREE SEEDLINGS

Now is the time to plant all kinds of tree seedlings. The best method is to dig a hole deep enough and large enough to allow the roots to hang naturally and not cramp them. Fill the hole around the roots with loose earth and pack down firmly. Then fill the hole entirely and tamp the earth firmly with the foot.

A mulch of broomsedge straw, wheat or oats straw, or hay, should be placed around the seedlings to protect them from the direct rays of the sun and to aid in retaining moisture around the roots. The same method of protection from fire and grazing, as that cited under Spring Gully Planting, should be employed to protect the area.

BREAKING SOD FOR SPRING PLANTING

Break lespedeza and other sod land as soon as possible for spring planting. This will absorb and conserve moisture for the succeeding crop. Early plowing assures thorough rotting of vegetation before planting time and makes seed bed preparation easier.

STRIP CROPPING

Does your cropping plan call for strip cropping? The field man in your area will be glad to help you plan strip cropping for this year. This plan is much more effective in controlling erosion than solid field planting.

PASTURES

Pastures should be properly seeded and then protected from grazing until the grass roots and the grass itself have developed sufficiently to assure a good stand. Eroded or galled spots should be reseeded when necessary, and fertilizer or manure applied upon the entire field. All weeds and briars should be kept down, and the grass should be mowed at least once during the summer.

At no time should pastures be grazed when the land is wet enough to damage the sod.

CROP ROTATION

A good crop rotation should provide sufficient cover to conserve soil. It will also help to balance the farm program, and will provide hay and other feed.

By rotating crops, vegetative matter is turned under at intervals, which adds organic matter to the soil and increases its fertility.

It is generally a good policy in the Deep River area to follow row crops with small grain, and then sow clover or lespedeza in the grain.

For winter cover crops, crimson clover, vetch, Austrian winter peas, wheat or rye, are recommended.

SPRING GULLY PLANTING

Gullied areas should be plowed or dug up and then seeded down to a mixture of 5 pounds Italian rye grass, 10 pounds orchard grass, 8 pounds tall oat grass, 8 pounds redtop grass, 2 pounds White Dutch clover, 8 pounds common lespedeza, 8 pounds Korean lespedeza and 6 pounds sericea lespedeza, a total of 55 pounds of this mixture per acre. The area should then be covered with 2 to 3 inches of hay, straw, broomsedge, straw or pine needle mulch. Tree seedlings are frequently planted on gully slopes as an effective aid in the control of erosion. If the soil is good, black locust should be used. If poor or, of medium fertility, pine seedlings should be planted. It is especially important that these areas be protected from fire and grazing, both of which are very destructive to young seedlings.

A 3-strand barbed wire fence around the plantation is the most effective means of keeping livestock off the area. Any further protective measures found necessary, should be taken against hogs, as they also destroy the young seedlings by rooting them out of the ground and frequently eating the roots.

MULCHING WET FIELDS

While land is too wet to plow, badly eroded areas in the pasture, gullies, lespedeza fields, and fields sown to hay mixture, should be mulched. The mulch will conserve moisture, add humus to the soil, and aid in securing a sod on these areas. Farm manure, damaged hay, straw, weeds or grass are good mulching material. These areas should be reseeded in late February or early March.

CARE OF WILDLIFE

Heavy snows create a serious situation for quail and other birds.

Early March is the low season in the supply of food, as most fruit and seeds have become exhausted and a few days of snow-blanketed ground will cause much hunger and suffering, and will have a tendency to drive the birds from their native haunts to other localities in search of food. At such a time emergency feeding becomes a necessity.

Bird roasts should be located and food placed in their immediate vicinity. Small grain, such as wheat, barley, buckwheat, millet or screenings from mills or grain elevators make excellent bird food. A sheltered gully shelf, under a tangle of wild grape or other thick vines, or beside an old log, are favorite places for the distribution of food.

Uncut patches of lespedeza, tall weeds or corn, when located near a good cover, also provide excellent food for quail and other desirable birds.

Proper care at this season of the year will keep the birds at home, and will insure the preservation of a sufficient breeding stock for the coming year.

Wildlife conservation is an integral part of the soil conservation program. Plants and shrubs used in the control of gullies and other eroded areas, provide food and cover for desirable wildlife and the birds repay the farmer by destroying millions of harmful and crop destroying insects.



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